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Resume of Kenneth D. Challenger, 1981

Challenger, Kenneth D.

Monterey, California: Naval Postgraduate School

RESUME OF KENNETH D. CHALLENGER

Kenneth D. Challenger was born in Kingston, Pennsylvania, on November 6, 1943. After receiving a B.S. in Metallurgical Engineering from the University of Cincinnati in 1967, he worked for Cameron Iron Works developing thermomechanical processes to improve the mechanical properties of a wide range of materials used in the aircraft and aerospace industry.

He returned to the University of Cincinnati in 1970 where he earned both an M.S. and a Ph.D. in Metallurgical Engineering. While at the University, he performed research on the relationships between microstructure and strength of structural materials and developed an ion bombardment technique to simulate neutron irradiation damage which would allow experiments on the irradiation effects on materials to be studied in the days instead of years.

In 1972 he joined the Fast Breeder Reactor Department of the General Electric Company and continued his research on irradiation damage to materials. In 1975 he was made manager of Plant Materials Development where he was responsible for the development of non-core structural materials used in Fast Breeder Reactors.

While at General Electric, he was an Adjunct Professor of Materials Science at San Jose State University where he taught graduate courses in Mechanical Properties, Electron Microscopy, Corrosion and Irradiation Damage.

In 1977 he joined the staff of the Materials Science and Engineering Department of Stanford University as a Research Associate. He performed research on the interaction of creep and fatigue damage in metals and fission product induced stress corrosion cracking of Zircoloy.

In December 1979 he joined the faculty of the Naval Postgraduate School, Monterey, California, where he is an Assistant Professor in the Materials Science section of the Mechanical Engineering Department. His current research interests are the effects of environment on creep and fatigue cracking in metals and the mechanical behavior of high strength steel weldments.

He is a member of the American Society for Metals, American Society of Mechanical Engineers, and has served on the Executive Committee of the Metallurgical Society of the AIME.